Tested Agent	Combined Agents(s)	Control arm	Trial	Treatment setting	Primary outcome	OS Control	OS Gain	OS HR	QoL	Toxicity	ESMO-MCBS v1.1	Ref
Atezolizumab		Docetaxel	OAK	Squamous or non-squamous stage IIIB or IV patients who had previously received one or two chemotherapy regimes	OS	9.6 months	4.2 months	0.73 (0.62-0.87)		Improved toxicity	**5**	1, 2
Atezolizumab		Chemotherapy	IMpower110	First-line treatment of patients with high PD-L1 expression	OS	13.1 months	7.1 months	0.59 (0.40-0.89)		Reduced grade 3/4 AE 30.1% vs 52.5%	**5**	3
Atezolizumab	Carboplatin + Paclitaxel + Bevacizumab	Chemotherapy + Bevacizumab	IMpower150	1st line advanced non-squamous NSCLC WT population	PFS/OS	14.7 months	4.5 months	0.78 (0.64–0.96)		Similar toxicity	**3**	4
Nivolumab		Docetaxel	CheckMate 017	2nd line after platinum-based therapy advanced squamous-cell NSCLC	OS	6 months	3.2 months 2- year survival gain 15%	0.59 (0.44-0.79)		Reduced grade 3/4 AE 7% vs 55%	**5**	5
Nivolumab		Docetaxel	CheckMate 057	2nd line after platinum-based therapy advanced non-squamous-cell NSCLC stratified for PD-L1	OS	9.4 months	2.8 months 2-year survival gain >10%	0.73 (0.59-0.89)	Improved	Reduced grade 3/4 AE10% vs 54%	**5**	6, 7, 8
Nivolumab	Ipilimumab	Chemotherapy	CheckMate 227	Stage IV untreated patients with PD-L1 expression on > 1% of tumout cells	OS	14.1 months	2.2 months	0.79 (0.67-0.93)	not eligible for ESMO-MCBS grading		2	9, 10
Nivolumab	Ipilimumab + Chemotherapy	Chemotherapy	CheckMate 9LA	Stage IV untreated NSCLC patients	OS	10.9 months	4.6 months	0.69 (0.55-0.87)	No QOL improvement (PRO Exploratory Endpoints)		Not Scored (Interim Analysis Abstract)	11.12
Pembrolizumab		Chemotherapy	KEYNOTE-24	1st line metastatic and advanced NSCLC with PD-L1>50%	OS	14.2 months	15.8 months	0.63 (0.47-0.86)		Improved toxicity	**5**	13, 14, 15
Pembrolizumab	Chemotherapy (pemetrexed)	Placebo	KEYNOTE-189	1st line advanced non-squamous NSCLC without EGFR or ALK mutations	OS	11.3 months	Above the cut-off of 3 months	0.49 (0.38-0.64)	Delayed deterioration (exploratory outcome not eligible for upgrade)		**4**	16 ,17, 18
Pembrolizumab	Chemotherapy	Carboplatin and either paclitaxel or nab-paclitaxel	KEYNOTE-407	1st line advanced squamous NSCLC	OS	11.3 months	4.6 months	0.64 (0.49–0.85)	Delayed deterioration (exploratory outcome not eligible for upgrade)	Similar toxicity; discontinuation of treatment due to toxicity of pembrolizumab combination (13.3% versus 6.4%)	**4**	19.2
Pembrolizumab		Docetaxel	KEYNOTE-010	2nd line after platinum-based therapy or TKI (for EGFR/ALK Mutated) advanced NSCLC>1% tumour cell PD-L1 expression (all) pembro 2 mg/kg	OS - All >1%-2 mg/kg	8.5 months	1.9 months 2- year survival gain >15%	0.71 (0.58-0.88)		Reduced grade 3/4 adverse events 13/16% vs 35	**5**	21

Pembrolizumab		Docetaxel	KEYNOTE-010	2nd line after platinum-based therapy OR TKI (for EGFR/ALK Mutated) advanced NSCLC>1% tumour cell PD-L1 expression (all) Pembro 10mg/kg	OS - All >1%	8.5 months	4.2 months	0.61 (0.49-0.75)		Reduce grade 3/4 adverse events 13/16% vs 36	**5**	21
Pembrolizumab		Docetaxel	KEYNOTE-010	2nd line after platinum-based therapy OR TKI (for EGFR/ALK Mutated) advanced NSCLC >50% tumour cell PD-L1 expression pembro 2 mg/kg	OS - >50% 2 mg/kg	8.2 months	6.7 months	0.54 (0.38-0.77)		Reduced grade 3/4 adverse events 13/16% vs 37	**5**	21
Pembrolizumab		Docetaxel	KEYNOTE-010	2nd line after platinum-based therapy OR TKI (for EGFR/ALK Mutated) advanced NSCLC >50% tumour cell PD-L1 expression Pembro 2mg/kg	OS - >50% 10 mg/kg	8.2 months	9.1 months	0.50 (0.36-0.70)		Reduced grade 3/4 adverse events 13/16% vs 37	**5**	21

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